Message

From: Blobaum, Sam [Blobaum.Sam@epa.gov]
Sent: 12/7/2020 10:04:08 PM
To: Bolen, Derrick [bolen.derrick@epa.gov]; Collazo Reyes, Yvette [CollazoReyes.Yvette@epa.gov]; Dekleva, Lynn [dekleva.lynn@epa.gov]; Dennis, Allison [Dennis.Allison@epa.gov]; Drinkard, Andrea [Drinkard.Andrea@epa.gov]; Dunn, Alexandra [dunn.alexandra@epa.gov]; Fischer, David [Fischer.David@epa.gov]; Giddings, Daniel [giddings.daniel@epa.gov]; Goodis, Michael [Goodis.Michael@epa.gov]; Hanley, Mary [Hanley.Mary@epa.gov]; Hartman, Mark [Hartman.Mark@epa.gov]; Henry, Tala [Henry.Tala@epa.gov]; Hughes, Hayley [hughes.hayley@epa.gov]; Kaiser, Sven-Erik [Kaiser.Sven-Erik@epa.gov]; Keigwin, Richard [Keigwin.Richard@epa.gov]; Kochis, Daniel [Kochis.daniel@epa.gov]; Labbe, Ken [Labbe.Ken@epa.gov]; Layne, Arnold [Layne.Arnold@epa.gov]; Lieberman, Paige [Lieberman.Paige@epa.gov]; Messina, Edward [Messina.Edward@epa.gov]; Mills, Madeline [Mills.Madeline@epa.gov]; Nguyen, Khanh [Nguyen.Khanh@epa.gov]; OPS CSID CB [OPS_CSID_CB@epa.gov]; Pierce, Alison [Pierce.Alison@epa.gov]; Richmond, Jonah [Richmond.Jonah@epa.gov]; Siciliano, CarolAnn [Siciliano.CarolAnn@epa.gov]; Sullivan, Melissa [sullivan.melissa@epa.gov]; Tyler, Tom [Tyler.Tom@epa.gov]; Vendinello, Lynn [Vendinello.Lynn@epa.gov]; Vernon, Jennifer [Vernon.Jennifer@epa.gov]
Subject: OCSPP News for December 7, 2020
Attachments: Inside TSCA Newsletter 12.7.pdf

OCSPP News Round-Up

Special News on Chlorpyrifos

- The Hill 12/4; EPA proposes reapproving uses of pesticide linked to brain damage in children
- Bloomberg Law 12/4; Tighter Controls for Insecticide Chlorpyrifos Proposed by EPA
- Genetic Literacy Project 12/7; EPA pitches new rules to limit risks linked to chlorpyrifos insecticide exposure

Special News on PFAS

- The Intercept 12/7; PFAS CHEMICAL ASSOCIATED WITH SEVERE COVID-19
- Inside TSCA 12/7; Environmentalists Fear EPA Will Deny TSCA Testing Petition On PFAS
- Inside TSCA 12/4; Cuomo Enacts New York's Broad Ban On PFAS In Food Packaging
- Inside TSCA 12/4; NDAA Conference Deal Narrows PFAS Procurement Limits For DOD
- Food Safety News 12/5; New York becomes third state to ban PFAS chemicals in food packaging

TSCA

- Inside TSCA Newsletter Attached
- Inside TSCA 12/4; EPA to host TCE risk management webinar
- Inside TSCA 12/4; Stakeholders Renew Longstanding TSCA Priorities With Biden Transition
- CT Watchdog 12/4; State's Efforts To End Use Of Toxic Firefighting Foam Slowed During Pandemic

Pesticides

- St. Louis Post-Dispatch 12/7; 'Buy it or else': Inside Monsanto and BASF's moves to force dicamba on farmers
- Bloomberg Law 12/7; Attorneys General Press for Ruling on Pesticide Use Restrictions
- WCIA-TV 12/7; From the Farm: Navigating the dicamba quandary
- Chemical Week 12/4; US Ninth Circuit denies request to reconsider Enlist Duo lawsuit

Blog/OpEd/Other

- CropLife 12/7; The Bad News Keeps Piling Up for Glyphosate
- Bergeson & Campbell TSCA Blog 12/7; EPA Releases Updates to List of Companies Subject to Fees for Risk Evaluations
- Bergeson & Campbell TSCA Blog 12/7; EPA Will Hold Webinars on Carbon Tetrachloride, TCE

++

EPA proposes reapproving uses of pesticide linked to brain damage in children

Rachel Frazin, The Hill

https://thehill.com/policy/energy-environment/528813-epa-proposes-reapproving-uses-of-pesticide-linked-to-brain-damage

The Environmental Protection Agency (EPA) has proposed to continue to allow uses of a pesticide that's been linked to brain damage in children.

In a proposed interim decision dated Thursday, the EPA continued to allow uses of the chemical chlorpyrifos, which agricultural workers can be exposed to through their jobs and that the general public can be exposed to through food.

However, the public has 60 days to comment on the proposal, meaning that it will likely be up to President-elect Joe Biden's administration to make the final decision on whether to approve the continued uses because his inauguration is just 47 days away.

Studies have linked chlorpyrifos exposure to issues such as lower IQ, impaired working memory and prolonged nerve and muscle stimulation.

However, a recent risk assessment by the agency argued that the "science addressing neurodevelopmental effects remains unresolved."

An agency spokesperson has previously told The Hill after the risk assessment that the EPA had "undertaken considerable efforts to assess the available chlorpyrifos data, providing a detailed discussion of the strengths and uncertainties associated with the epidemiology studies."

Opponents have argued that using the pesticide should be prohibited in light of the studies linking it to neurodevelopmental issues.

"Trump's EPA continues to fail to protect our children from this brain-damaging poison," Nathan Donley, a senior scientist at the Center for Biological Diversity, said in a statement.

"Chlorpyrifos needs to be banned. ... This is a disgraceful parting gift to the pesticide industry from [Administrator Andrew] Wheeler and his cronies in the EPA," Donley added.

In 2015, the Obama administration proposed banning its use on food and crops. However, in 2017, then-EPA Administrator Scott Pruitt reversed course, saying that further study was warranted.

"We are returning to using sound science in decisionmaking — rather than predetermined results," he said at the time.

The new proposal from EPA would place new restrictions on how chlorpyrifos can be applied and add requirements for personal protective equipment use.

Donley argued that these measures are "wholly inadequate."

"In some ways it is better than nothing ... but I would actually argue it's worse than nothing because it puts out the guise that a regulatory agency is doing something and that might make people very complacent," he told The Hill.

Tighter Controls for Insecticide Chlorpyrifos Proposed by EPA

Pat Rizzuto, Bloomberg Law

https://news.bloomberglaw.com/environment-and-energy/tighter-controls-for-insecticide-chlorpyrifos-proposed-by-epa?context=search&index=14

The EPA on Friday proposed multiple strategies—including limiting some spraying—to reduce human and wildlife's exposures to chlorpyrifos, a widely-used insecticide that can harm the nervous system.

The Environmental Protection Agency's plan to allow farmers to continue using chlorpyrifos despite its potential to harm babies developing brains has drawn criticism from Democrats and some states along with health and environmental groups.

- The group Earthjustice faulted Friday's proposed restrictions as failing to protect children.
- CropLife America President Chris Novak, however, described it as a conservative—meaning health-protective—strategy to examining and managing risks.
- The EPA's proposals include revising labels to reduce the possibility of chlorpyrifos reaching drinking water; increasing the personal protective equipment that pesticide applicators and other workers must use; and raising the limits on how it can be sprayed to cut down on the amount of chlorpyrifos drifting off fields.

EPA pitches new rules to limit risks linked to chlorpyrifos insecticide exposure

Todd Neeley, Genetic Literacy Project

https://geneticliteracyproject.org/2020/12/07/epa-pitches-new-rules-to-limit-risks-linked-to-chlopyrifos-insecticide-exposure/

EPA announced a proposal on [Dec. 4] to improve the safety of using the insecticide chlorpyrifos. The proposal follows a draft risk assessment the agency released in September.

The EPA is proposing labeling amendments to limit applications associated with drinking water risks as well as requiring additional personal protection equipment and application restrictions to address handler risks.

The agency is also proposing spray drift mitigation in addition to use limitations and application restrictions to reduce exposure for off-target organisms.Top of Form

Once the proposal is published in the Federal Register, the EPA will accept public comments for 60 days on the draft risk assessment and the additional proposal, according to a news release from the agency.

That assessment identified dietary risks in adults and children, as well as risks to professional handlers of the chemical. The EPA's draft assessment also identified potential adverse effects to mammals, birds, fish, and terrestrial and aquatic invertebrates.

PFAS CHEMICAL ASSOCIATED WITH SEVERE COVID-19

Sharon Lerner, The Intercept

https://theintercept.com/2020/12/07/pfas-pfba-severe-covid-study/

ELEVATED LEVELS OF a PFAS compound were associated with more severe forms of Covid-19, according to a Danish study now undergoing peer review. The research, which involved 323 patients infected with the coronavirus, found that those who had elevated levels of a chemical called PFBA were more than twice as likely to have a severe form of the disease.

PFBA is one of a class of industrial compounds, often called "forever chemicals," that has come to contaminate soil, water, and food around the world. It has been presented as relatively safe because it stays in human blood for much less time than some of the other compounds in the class and is a shorter molecule. Both traits are thought to be indications of its innocuousness. PFBA, which was created by 3M, is based on a four-carbon chain and is gone from human blood in a matter of days. It is still in use, while PFOA, which is based on eight carbons and stays in the human blood for years, has been phased out since 2015.

Though PFBA exits the bloodstream relatively rapidly, it accumulates in the lungs, which likely explains the finding of the Danish study. "It's probably what's in the lungs that counts because that's where the big Covid battle is fought," said Philippe Grandjean, the principal author of the study. Grandjean's study involved 323 patients with Covid-19, 215 of whom were hospitalized. The researchers analyzed the blood of these patients for the presence of five PFAS compounds

and found that only perfluorobutanoic acid, or PFBA, was associated with the severity of the disease. More than half of those seriously ill with Covid-19 had elevated PFBA levels in their plasma, while less than 20 percent of those with mild illness had elevated levels of the chemical.

The Centers for Disease Control and Prevention does not include PFBA in its surveillance of the blood levels of various PFAS compounds. But it is clear that the chemical is both widespread and particularly elevated in certain areas. Research conducted by 3M in 2005 showed that 20 of 36 pooled blood samples from the general population contained PFBA. More recent research from the Minnesota Department of Health shows that levels of the compound are elevated in the East Bay area near a 3M plant in the suburbs of Minneapolis–St. Paul. The chemical has also been found in other parts of the world, including Vietnam, Jordan, Thailand, and Japan. PFBA was also found in the Tennessee River near a 3M plant in Decatur, Alabama, and near a 3M plant in Cordova, Illinois. And it has been found in food, including radish, peas, tomatoes, and lettuce.

PFBA is used in electronics; clothing, including water-resistent outerwear; protective gear for medical staff and firefighters, such as surgical gowns; firefighting foam; carpets; floor polish; laboratory equipment; leather treatment; food packaging; cosmetics, including body lotion and foundation, concealer, eye shadow, powder; and bike lubricants, according to a recently published paper on the previously unknown uses of the chemicals.

According to the Minnesota Department of Health, which has set a safety limit for the chemical, PFBA causes changes in the liver and thyroid, as well as decreased red blood cells, decreased cholesterol, and delayed eye opening in animal experiments. A division of the Environmental Protection Agency called the Integrated Risk Information System, or IRIS, is in the process of assessing the dangers of PFBA and is scheduled to release its report in the first quarter of the coming year. 3M did not immediately respond to a request for comment.

Grandjean's previous research has shown that higher PFAS levels in children correlated to weaker response to various vaccines — and he fears the same will be true for a Covid-19 vaccine.

"I would think what we've seen before is very likely to happen again," he said about the vaccines now in development for Covid-19. Communities that have elevated levels due to industrial contamination should get special consideration when a vaccine is distributed, he said. "They may need more than the 1 or 2 shots recommended for everyone else because their antibody production may be suppressed."

Environmentalists Fear EPA Will Deny TSCA Testing Petition On PFAS

Maria Hegstad, Inside TSCA

https://insideepa.com/tsca-news/environmentalists-fear-epa-will-deny-tsca-testing-petition-pfas

Environmentalists who petitioned EPA to order Chemours Co. to conduct toxicity testing on 54 per- and polyfluoroalkyl substances (PFAS) found near its Fayetteville, NC, plant are concerned agency officials are planning to deny their TSCA petition because of its scope and request for animal testing.

In a Nov. 25 letter to Alex Dunn, EPA's assistant administrator for the Office of Chemical Safety and Pollution Prevention, the environmentalists seek to assuage concerns Dunn raised during a Nov. 18 meeting regarding the scope of the requested testing program as well as the number of animals that would be consumed by it.

"You described the testing proposed in the petition as a 'big ask,' implying that the studies we seek are too costly and unnecessarily extensive. This is simply incorrect. The amount of testing outlined in the petition is proportional to the serious risks of harm it seeks to address," the petitioners argue.

"The 54 PFAS released from the Chemours facility and included in our petition have been measured in human blood, drinking water, groundwater, soil, air, and/or locally produced food adjacent to and downstream of the Fayetteville plant. For the drinking water pathway, nearly 300,000 residents experienced substantial exposure for decades, and several of the PFAS from the Chemours discharges are still detected in public drinking water despite recent reductions in discharges."

The six groups -- Center for Environmental Health, Cape Fear River Watch, Clean Cape Fear, Democracy Green, Toxic Free NC and The NC Black Alliance -- petitioned EPA in October, marking an early measure of the agency's new testing authority in section 4 of the revised Toxic Substances Control Act (TSCA).

The petition was filed under authority in TSCA section 21, which gives the agency 90 days to respond, meaning that the Trump EPA will likely answer the petition, though an environmentalist told *Inside TSCA* in October that any Trump EPA decision could be reconsidered by the new administration.

The petition details a lengthy list of tests the groups argue Chemours should conduct, including physical-chemical properties; multiple toxicology studies, including two-year, multi-generation cancer bioassays; ecological effects and fate studies; and a "human health study for the Cape Fear watershed" similar to a court-ordered study design used for DuPont's Parkersburg, WV, PFOA (C8) study.

But the petitioners made clear during a press call on the petition that they had sought to limit any animal testing that may be required to comply with TSCA's requirements. As in their recent letter to Dunn, they said they are seeking a testing strategy designed to conduct only the testing they believed necessary through a "targeted" number of animal tests.

The petitioners also urge EPA to contract with the National Academy of Sciences "to form an independent expert science panel with responsibility for overseeing all aspects of the testing program," in an effort to "maximize the credibility and objectivity of the data and key findings."

The petition has won support from Rep. Richard Hudson (R-NC), the GOP lawmaker who represents the district in which the facility is located. In a recent op-ed, Hudson says the petition underscores why he and other lawmakers included a provision in the 2016 revisions to TSCA "to allow [EPA] to force companies who are responsible for polluting our drinking water to pay for the research into the health effects of the chemicals they discharge."

As a result, "I was extremely encouraged to see groups in our community petition the EPA to use this authority as it relates to PFAS and GenX in the Cape Fear River. This is exactly the type of action we wanted to encourage when we re-wrote the law, and I applaud this effort to hold Chemours Co. accountable," he wrote.

Carefully Targeted

In their new letter, the petitioners reiterate their claims that the testing is both targeted and within Chemours' means. "The proposed testing is carefully targeted at specific endpoints that have been previously linked to the PFAS class and that are drivers for risk-based exposure limits. It includes the smallest number of studies necessary to determine whether the 54 substances are of concern for these endpoints and to understand dose-response relationships," the letter states.

"Human and animal studies are proposed because of the importance of identifying health human risks that might otherwise be missed in studies of one of these species. Similarly, mixtures would be tested because real-world exposure is to multiple PFAS simultaneously. Limiting the scope of testing to reduce cost would run the risk of inconclusive or incomplete findings, resulting in inadequate protection of at-risk communities."

The letter argues that the "costs of the proposed testing are modest and reasonable when compared to its significant public health benefits and Chemours' considerable financial resources. PFAS have been produced at the Fayetteville plant for over four decades. Chemours has annual revenues in the $6 billion range; its predecessor DuPont had far greater revenues. Even if the proposed testing program costs tens of millions of dollars, these costs would be dwarfed by the much larger sales and profits that Chemours and DuPont derived over time from their PFAS operations. Indeed, the companies were able to boost profits by avoiding the upfront testing and controls on environmental releases that would have prevented the contamination of drinking water supplies that has now occurred."

The letter also seeks to convince Dunn that animal testing is necessary to answer toxicity concerns about the chemicals because new approach methods (NAMs) of conducting toxicity tests are not yet ready for such use, noting that Dunn at the meeting last month "expressed concern about the animal studies proposed by the petition and suggested that an

adequate understanding of the health and environmental effects of the 54 PFAS could be obtained from [NAMs]. This is simply not realistic or scientifically defensible and would be contrary to EPA's obligations under TSCA."

The petitioners argue that while TSCA has language directing EPA to reduce vertebrate animal testing to the extent possible, "the goal of TSCA is protection of human health. ...The 2016 TSCA amendments direct EPA to develop a strategy to encourage the development of NAMs and reduce reliance on traditional animal studies while filling the many data gaps that exist on the health and environmental effects of chemicals. However, the law is clear that, before NAMs can replace animal tests, they must be shown to "provide information of equivalent or better scientific quality and relevance for assessing risks of injury to health or the environment of chemical substances or mixtures." EPA's efforts to develop NAMs to predict the toxicity of chemicals have simply not progressed to the point where they come close to satisfying this standard."

Specifically, they argue that "a PFAS testing program based on NAMs alone would fail to achieve TSCA section 4's goal of developing 'sufficient information and experience' so that the effects of PFAS on health and the environment 'can reasonably be determined or predicted.'"

Additionally, the groups argue in their letter that the results of their testing petition could be used to assist the development of NAMs approaches for evaluating PFAS chemicals in the future, noting that "NAMs cannot be validated without a robust in vivo data set across a broad cross-section of individual compounds that can be used to assess NAMs' utility for predicting health effects and dose response. The testing we propose in our petition would provide exactly the kind of data set needed to develop and validate NAMs for application during future PFAS risk evaluations. But without the studies requested in our petition, there is no reasonable path forward to use NAMs to understand the health effects of these (or other) PFAS."

Cuomo Enacts New York's Broad Ban On PFAS In Food Packaging

Diana DiGangi, Inside TSCA

https://insideepa.com/tsca-news/cuomo-enacts-new-york-s-broad-ban-pfas-food-packaging

Just weeks before an end-of-year deadline, New York Gov. Andrew Cuomo (D) has enacted the state's toughest-in-the-nation ban on all per- and polyfluoroalkyl substances (PFAS) in food packaging, setting a precedent that will put pressure on other states to follow.

Cuomo Dec. 3 signed S.8817, a bill sponsored by State Sen. Brad Hoylman (D) that seeks to "prohibit the distribution, sale, and offer for sale in New York of food packaging containing PFAS substances as 'intentionally added chemicals.'"

The measure defines PFAS as "a class of fluorinated organic chemicals containing at least one fully fluorinated carbon atom," an approach that appears to apply to all chemicals in the class -- and an approach that industry groups strongly oppose.

The bill, which passed both houses of the New York State legislature over the summer, was officially delivered to Cuomo on Nov. 20.

The law will take effect on Dec. 31, 2022.

Hoylman has previously cited the Trump administration's failure to adequately regulate the substances as the reason for pushing the legislation. "Donald Trump's [Food and Drug Administration] has failed to properly regulate the dangerous class of chemicals known as PFAS, putting the health of families across New York at risk," Hoylman said in a statement after the bill first cleared the legislature. "If the federal government won't lead, New York will"

Several states are already considering similar measures. For example, California regulators are weighing a plan that could eventually bar the use of a wide range of PFAS from use in food packaging while requiring safer alternatives, though officials have suggested they may narrow its reach.

And Washington state recently listed food and drink cans, as well as leather and textile furnishings that contain PFAS, as priority products for regulation under its program to limit harmful releases.

Pressure for states to take similar actions is likely to grow especially after environmentalists earlier this year released a study that found that nearly half of the packaging that was tested from six fast food chains contained PFAS above a specified screening level.

In a press release from the environmental law group Earthjustice, the group expressed appreciation for the bill being signed into law, citing the emerging link between toxic PFAS and worsened outcomes from COVID-19 as reasons to take action on the chemical group.

"New York has taken a giant step in protecting its residents from toxic PFAS chemicals," said Earthjustice toxics attorney Eve Gartner in a statement. "We will be grappling for decades with how to get PFAS out of our drinking water -- and to pay the costs of that clean-up -- so it is just common sense to prohibit the use of PFAS in food packaging, since we know that these chemicals end up in our food and our bodies."

But environmentalists are also pressing states to go beyond banning PFAS in food packaging. For example, they are pressing the Toxics in Packaging Clearinghouse (TPCH), a nine-state group that includes New York, to approve draft model legislation that seeks to ban PFAS, as well as phthalates, from a range of packaging products.

Industry groups, however, are strongly opposing the model legislation, in large part because it targets the entire class of PFAS, an approach they say is scientifically inaccurate and economically harmful.

"Painting all chemicals that share some generic name with a broad brush makes for bad policy that can prevent consumers from accessing important, safe and beneficial products they need," ACC said in comments on to TPCH's proposal.

As a result, ACC says, it is concerned that the proposed model legislation will lead to "flawed regulations -- and chemical assessments based on these regulations -- and may create public confusion, cause unwarranted alarm, and product de-selection. All of which serves to further erode public confidence in existing chemical management programs," the group's comments say.

NDAA Conference Deal Narrows PFAS Procurement Limits For DOD

Diana DiGangi, Inside TSCA

https://insideepa.com/tsca-news/ndaa-conference-deal-narrows-pfas-procurement-limits-dod

A House-Senate conference committee has agreed to preserve amendments to the fiscal year 2021 National Defense Authorization Act (NDAA) that barred the Defense Logistics Agency (DLA) from procuring certain items that contain per- and polyfluoroalkyl substances (PFAS), though the final deal significantly narrows earlier language.

When it passed the House and Senate earlier this summer, the measure would have prevented the DLA from sourcing any PFAS-containing cookware, food packaging materials, furniture or floor waxes, carpeting, rugs, personal care items, dental floss, and sunscreen.

However, the language in the final bill was scaled back to only cover perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA), two PFAS that have largely been phased out of manufacturing, and the items covered were scaled back to only include cookware, cooking utensils, upholstered furniture, carpets and rugs.

The procurement limitations were among a handful of PFAS provisions that made it into the final conference report despite calls from many environmentalists -- and House lawmakers -- for even broader provisions.

Other PFAS provisions that remained in the final bill include requirements for the Department of Defense (DOD) to notify local farmers in the event of PFAS detection in groundwater and to notify the congressional defense committees of uncontrolled releases of PFAS-containing firefighting agents; establishment of a prize for innovative research that results in a replacement firefighting foam that does not contain PFAS; a requirement for DOD to survey and report on

firefighting equipment technology that will help phase out PFAS; the establishment of an interagency body to coordinate PFAS research; and the authorization of $1.4 billion for environmental remediation, including for PFAS.

In addition, the final bill also authorized additional funds to continue a federal health study assessing the effects of PFAS exposure around several contaminated military sites.

Environmentalists expressed disappointment with the final bill's PFAS provisions, especially lawmakers' failure to preserve House language that would have subjected DOD to increased cleanup liability for its legacy releases.

"We're grateful that the NDAA once again seeks to address the PFAS contamination crisis by banning some Defense Department uses of PFAS, by expanding PFAS research and by accelerating efforts to develop PFAS-free firefighting gear and firefighting foams," the Environmental Working Group (EWG) said in a statement.

"But the NDAA falls far short of what's needed to address the contamination crisis facing our service members and neighboring communities. . . . Tragically, this bill will do little to clean up the existing legacy contamination at bases and nearby communities and does nothing to hold polluters or the Pentagon accountable when they fail to act to protect us," EWG said.

The group also criticized lawmakers for dropping provisions that would have required expanded PFAS blood testing for service members, despite growing evidence that suggests PFAS makes coronavirus vaccines less effective.

Congressional Debate

The PFAS provisions in the NDAA had sparked tensions between lawmakers, as a group of House members pushed the conference committee to adopt a host of additional provisions that had not been included in the Senate bill.

By contrast, a bipartisan group of senators urged conferees to adopt a narrower set of amendments that were included in the Senate version of the bill. Only two of these were ultimately included: the study into firefighting equipment, and authorization for DOD to work with private entities in an attempt to find PFAS-free firefighting foam.

While the conference committee dropped a host of provisions that had been included in each chambers' bills, and narrowed those that remained, many expect the NDAA to continue serving as a vehicle for addressing PFAS given continuing concerns about PFAS contamination.

"There has been an unprecedented amount of interest in PFAS in the 116th Congress, with more than two dozen provisions on PFAS becoming law, and dozens more proposed," Melanie Benesh, a legislative attorney with EWG, said recently.

"As more contaminated sites are uncovered and public awareness grows, legislative interest is anticipated to continue, and new legislators will likely be interested in playing a role in shaping the evolving law on PFAS in the 117th Congress," Benesh said. "Many of the bills introduced in the 116th Congress that did not become law will likely be reintroduced."

New York becomes third state to ban PFAS chemicals in food packaging

Food Safety News

https://www.foodsafetynews.com/2020/12/new-york-becomes-third-state-to-ban-pfas-chemicals-in-food-packaging/

New York Gov. Andrew Cuomo has signed legislation that will help protect consumers from the harmful effects of a dangerous class of chemicals linked to serious health problems, according to Consumer Reports.

The new law drafted by Assemblymember Patricia Fahy and Sen. Brad Hoylman bans polyfluoroalkyl substances (PFAS), sometimes called "forever chemicals" because they do not break down easily and persist in human bodies and the environment.

"PFAS chemicals are pervasive in food packaging and have been linked to serious health problems that can put consumers at risk," said Michael Hansen, Ph.D., senior scientist for Consumer Reports. "This law will protect New

Yorkers by reducing their exposure to PFAS in the food they eat and by curbing the amount that contaminates the air and drinking water."

PFAS chemicals have been in wide use since at least the 1950s and studies of the U.S. population have found them in 95 percent of all people tested. Some manufacturers add PFAS to food packaging to make it water and grease-resistant. Unfortunately, it also contaminates the food it comes into contact with and can be released into the environment when manufacturers dispose of materials containing the chemicals.

The Food and Drug Administration recently reported that it had detected PFAS in a variety of foods purchased around the country, including produce, meats and seafood, and chocolate cake. People are exposed to PFAS when they consume food or drinking water contaminated with the chemicals.

Studies have shown that exposure to PFAS chemicals is associated with immunotoxicity, cancer, thyroid disease, birth defects, and decreased sperm quality. PFAS exposure reduces the immune response to childhood vaccines and may increase the risk of infectious disease. In addition, PFAS exposure has been directly linked to several underlying conditions that make people more vulnerable to severe symptoms of COVID-19, including obesity, asthma, kidney disease, and high cholesterol.

New York now joins Washington state and Maine, which have already prohibited PFAS in food packaging.

Safer alternatives to PFAS have proven to be as effective at repelling water and grease.

"We applaud Gov. Cuomo for signing this bill into law and making New York a leader in the effort to protect the public from hazardous forever chemicals," said Chuck Bell, advocacy program director for Consumer Reports.

EPA to host TCE risk management webinar

Inside TSCA

https://insideepa.com/tsca-takes/epa-host-tce-risk-management-webinar

EPA will host a webinar to review its recently released final TSCA risk evaluation of the common solvent trichloroethylene (TCE) and potential regulatory risk-management options, the agency has announced.

The webinar will be held Dec. 15.

EPA has hosted similar webinars following the release of its other final TSCA risk evaluations to explain its findings of "unreasonable risk," to get input on potentially writing rules to manage those risks.

EPA's Dec. 4 announcement follows a Nov. 30 call for nominations from small-entity representatives to advise the agency on how to craft its pending TSCA risk management rules for the final TCE and carbon tetrachloride evaluations while reducing adverse effects on small businesses.

Both requests come on the heels of EPA's Nov. 23 release of its final evaluation of TCE, finding that 52 of 54 evaluated uses of the chemical pose unreasonable risks that the agency must regulate.

According to EPA, conditions of use with unreasonable risks include manufacturing; processing as a reactant/intermediate, processing into a formulation, processing into articles, repackaging and recycling; use in various industrial and commercial applications including as a solvent for cleaning or degreasing; industrial and commercial use in adhesives and sealants, lubricants and greases, functional fluids, paints and coatings, and in a variety of cleaning products; commercial use in several products; several consumer uses; and disposal.

The conditions of use that EPA determined do not present an unreasonable risk include distribution in commerce and consumer use of pepper spray.

Similar to its controversial draft, EPA's final evaluation avoids basing its quantitative risk evaluation on the most sensitive possible endpoint -- the potential for fetal heart malformations -- which had been the agency's historic

practice. Environmentalists and public health advocates have lambasted EPA officials for moving away from that approach in the final TCE risk review.

Stakeholders Renew Longstanding TSCA Priorities With Biden Transition

Maria Hegstad, Inside TSCA

https://insideepa.com/tsca-news/stakeholders-renew-longstanding-tsca-priorities-biden-transition

Stakeholders are renewing their long-standing TSCA priorities as the Biden administration begins its transition, with environmentalists reiterating their calls for EPA to take strict actions on chemicals while an industry group is restating its push for EPA to continue its formaldehyde evaluation under the law's "best available science" standard.

For example, Safer Chemicals Healthy Families (SCHF) released a Dec. 2 blog post castigating EPA for its "inaction" in failing to quickly adopt emergency measures under the Toxic Substances Control Act (TSCA) to bar commercial uses of paint strippers containing methylene chloride.

This "means workers risk their lives using deadly paint strippers," the group said.

In a broader vein, the Center for Biological Diversity (CBD) Dec. 3 issued a suite of recommendations to the transition team on a range of environmental issues, including calling for the use of more conservative assumptions in TSCA and other chemical risk evaluations, less focus on economic costs and benefits in risk management actions and other steps that would clamp down on toxic chemicals.

"If a chemical or pesticide has the potential to cause adverse effects or a risk of injury, then the EPA must fully mitigate and ameliorate that harm so that there is zero risk of harm to people or the environment," CBD says.

Just days earlier, the American Chemistry Council (ACC) posted a Nov. 30 blog highlighting its support for the agency to continue its planned TSCA risk evaluation of formaldehyde, which will consider only risks from selected uses, rather than return to a likely broader, more-conservative hazard assessment that the agency's Integrated Risk Information System (IRIS) assessment has been struggling to complete for years.

"We appreciate the progress EPA has made identifying the conditions of use and exposure scenarios it will focus on for the formaldehyde risk evaluation. The safety of the general public and workers is a top priority, which is why industry supports an updated formaldehyde review under TSCA," ACC's blog says.

Such calls highlight longstanding arguments and concerns from the groups about EPA's assessment and regulation of chemicals just weeks before the arrival of the Biden administration, which is expected to take a very different approach to environmental policy than the Trump administration.

SCHF, for example, has long urged EPA to exercise rarely used TSCA emergency authority to regulate uses of methylene chloride and several other chemicals among the first 10 the agency is evaluating.

Environmentalists and former EPA officials had urged EPA in 2019 to adopt a host of emergency limits on a series of methylene chloride's uses given the then-draft assessment that found they pose "unreasonable risks" that must be addressed.

But earlier this year, EPA's toxics chief Alex Dunn rebuffed those requests as well as similar requests for other chemicals, arguing that EPA could not take risk management actions without completing measured risk evaluation and risk management steps outlined in TSCA.

'Why Wait?'

SCHF is now renewing its request on methylene chloride, seeking to expand a Trump EPA rule that banned the sales of methylene chloride-containing paint strippers to consumers to also prohibit commercial uses of the products.

"Acute exposures to paint strippers containing the dangerous chemical methylene chloride have killed as many as 85 people since 1980. Two-thirds of those people have died on the job," the group argues, raising once again arguments the group has pressed EPA to consider for years -- in its efforts to ban all uses of the paint strippers by all users.

The group notes that EPA last June released a final methylene chloride evaluation of uses other than consumer uses of paint strippers -- and determined that the chemical requires further regulation to mitigate the unreasonable risk the agency found in 47 out of 53 conditions of use.

"Why now?" SCHF's blog asks. "The real question is 'Why wait?'"

The group notes the Obama administration's 2014 methylene chloride assessment led officials to propose banning the chemical's use in paint strippers shortly before leaving office, though the Trump administration sat on the proposal for months, before finalizing the rule banning consumer users only.

"EPA's initial risk assessment was issued in 2014, so it was not surprising that one of the first actions proposed under 'new' TSCA when it was revised in 2016 was to ban the products," the group writes. "This is the kind of public health protection that we envisioned as we campaigned for TSCA reform. So, it's not a lack of authority that has kept EPA from taking action on this danger to workers. . . . EPA's failure to include commercial use in its March 2019 final rule left tens of thousands of workers exposed to those same dangers."

SCHF is currently suing EPA over that rule's failure to address all risks identified in the evaluation, specifically risks to workers. Environmentalists and unions are also separately challenging the recently finalized methylene chloride evaluation's findings that a handful of evaluated uses were not deemed to present unreasonable risk.

SCHF is calling for signatures on a new petition addressed to Administrator Andrew Wheeler, calling on EPA to ban methylene chloride paint strippers from commercial use as well. "EPA has the authority and the responsibility to protect those most vulnerable to dangerous chemicals. No one should have to risk their life to earn a paycheck," the group concludes.

But with methylene chloride among the first 10 chemicals EPA selected for evaluation under the revised TSCA, and EPA's completion of the new evaluation last June, the agency is now racing another deadline in the new statute -- issuing a proposed regulation within one year -- work that will be completed by the Biden EPA.

Formaldehyde Evaluation

Formaldehyde, in contrast, is among the 20 chemicals in the second batch of existing chemicals EPA has selected to evaluate. The agency finalized scope documents for each evaluation last August and faces a Dec. 30, 2022 deadline to complete them.

Given the timeline, the Biden EPA will complete that assessment, and could write any resulting risk management regulations were the agency to find uses of formaldehyde that pose unreasonable risk.

ACC has been sparring with EPA over its efforts to update the agency's 1990 formaldehyde IRIS evaluation for years -- most notably opposing the research office's draft 2010 IRIS assessment that linked formaldehyde exposure to myeloid leukemia, based on a study of blood cell changes in Chinese workers exposed to the chemical.

ACC, however, argues that the Chinese workers study is poorly conducted and should not be relied on in EPA's evaluations. It has funded studies designed to explore whether inhaled formaldehyde could reach the distant sites in the body necessary to cause myeloid leukemia, and to differentiate between endogenously-produced formaldehyde in the body and that inhaled from an external source.

"Published scientific studies indicate that lifetime exposure to high levels of formaldehyde in air can cause nasal cancer in laboratory animals, however these levels are well above workers' and the public's every day exposure. . . . According to the large body of research available, the low levels of formaldehyde to which workers and the public are exposed are highly unlikely to lead to any adverse health effects," ACC's blog states.

EPA's 2010 draft IRIS evaluation was never finalized. After a critical peer review by the National Academy of Sciences in 2011, EPA set out to revamp both the formaldehyde assessment and the IRIS program.

A new draft evaluation has apparently been completed, but despite calls from Senate Democrats, the Trump EPA refused to release it and instead, selected formaldehyde as one of the second batch of chemicals its toxics office will evaluate under TSCA.

Of the toxics office's role, ACC writes, "[s]cience is ever-evolving; research that was once relevant may now be obsolete or disproved by new, more advanced science. That's why EPA must adhere to the 2016 TSCA amendments for current and future risk evaluations. These amendments require the use of the best available science and weight of scientific evidence when it comes to evaluating risk. The 2016 TSCA amendments also establish a transparent systematic review process, a clearly defined approach to identifying relevant scientific information, evaluating the quality of data, and weighing the information."

"ACC is confident that when EPA follows the required science protocols in conducting a risk evaluation of formaldehyde, using the best available, highest quality and most relevant data will demonstrate that the responsible uses of formaldehyde, and any potential exposures, continue to be properly managed."

State's Efforts To End Use Of Toxic Firefighting Foam Slowed During Pandemic

Gregory B. Hladky, CT Watchdog

http://ctwatchdog.com/misc/states-efforts-to-end-use-of-toxic-firefighting-foam-slowed-during-pandemic

The call came into the Lisbon fire department at 3:07 p.m. on Sept. 9: A vehicle was ablaze at a home on Bundy Hill Road. By the time the fire truck reached the scene, the flames had spread from the car to the side of the home and were moving rapidly.

Firefighters immediately began spraying a fire suppression foam containing hazardous chemicals known as PFAS and had the blaze out within minutes.

The homeowners were warned not to use or drink their well water, fearing the shallow well was likely contaminated by the toxic foam. The family decided to have a new well dug.

"Getting [PFAS foam] off the streets, to stop the bleeding, is now priority one," said Ray Frigon, an environmental analyst with the state Department of Energy and Environmental Protection (DEEP).

Connecticut is now undertaking a difficult, costly effort to stop the use of PFAS firefighting foam—including buying it from local fire departments—before it can contaminate more wells, drinking water systems, rivers and streams.

PFAS is a short-hand term covering thousands of man-made polyfluoroalkyl and perfluoroalkyl compounds developed in the 1940s that have been linked to different types of cancer, immune system problems, obesity, childhood development issues, diabetes and other health problems.

All over Connecticut, fire departments faced with dangerous fuel and chemical fires are routinely spraying this type of hazardous PFAS foam on roads, private property, at marinas and industrial sites.

In September and October alone, PFAS foam was used to extinguish fires in Greenwich, Fairfield, Stamford, Norwalk, Milford, East Granby, and Woodstock, according to state records.

"We get lists of [PFAS] discharges by fire departments... sometimes dozens of times a month," Frigon said in a recent interview.

The use of PFAS firefighting foam is a devilish trade-off: The foam is great at suppressing fuel and chemical blazes, but research shows PFAS can also pose major public health and environmental risks. Nicknamed "forever chemicals," these compounds can last for extraordinary lengths of time in the human body and the environment.

Patrick McCormack, director of the regional health district covering Lisbon, said health officials also warned the homeowners of the risks resulting from the Sept. 9 fire. It turned out the owner's insurance ended up covering the cost of drilling a new well, McCormack said.

The COVID-19 pandemic has caused delays in the state's efforts on PFAS, and questions about safely disposing or storing these hazardous firefighting chemicals are also becoming a potentially costly headache.

These chemicals have been used in everything from firefighting foam to pizza boxes and PFAS pollution has become a major concern across the U.S. The federal government still hasn't declared PFAS to be a hazardous substance. Many states have moved independently to enact their own tough standards for how much of these chemicals should be allowed in drinking water. State officials here say Connecticut is likely to follow suit.

Last year, multiple spills of PFAS firefighting foam from Bradley International Airport into the Farmington River triggered the creation of the Connecticut Interagency PFAS Taskforce to create an action plan to minimize exposure of PFAS to state residents.

In November 2019, the task force called for buying back firefighting foam from fire departments across the state, replacing it with less toxic fire suppressing foam, and doing widespread testing for PFAS around old landfills and industrial sites that could be polluting drinking water wells and systems.

The General Assembly in March allocated $2 million for the anti-PFAS programs. State officials say the spread of COVID-19 has resulted in delays in implementing some of the programs and the release of funds to support them.

Lori Mathieu, head of the state Department of Health's public drinking water section, said creation of a planned state Safe Drinking Water Advisory Council "has been on pause because of COVID." The council, which is expected to develop tougher Connecticut drinking water standards for PFAS, isn't expected to be up and running until next summer, she said.

State officials have asked all major public drinking water systems to test for PFAS, and those tests haven't revealed any major contamination. But plans for widespread testing around landfills that may be polluting private wells have been put on the back burner because of the current focus on ending the use of firefighting foam.

Anne Hulick, head of the Connecticut chapter of Clean Water Action, said she understands the difficulties state officials are facing but noted that other states have been able to set far tougher PFAS standards for drinking water.

"Why can't we move a little quicker, given what other states are doing," she asked.

The recommended federal safety level for PFAS in drinking water is 70 parts per trillion for two types of the chemicals. Connecticut's guidelines say that the sum of "five PFAS chemicals should not exceed the limit of 70 parts per trillion," according to a DEEP website. Vermont, for example, has a more stringent level at 20 parts per trillion.

Frigon estimates the state will start to buy back PFAS foam from local departments in early 2021. Some fire departments, including Bridgeport, Preston and Berlin, have already begun using non-PFAS foam to fight chemical and fuel fires, Frigon said.

"It wasn't cheap," Preston Fire Chief Thomas Casey said of the purchase of an alternative foam. He said his small department currently has about 40 gallons of old PFAS fire suppressant stored in a drum as they wait for the state buy-back program to get underway.

State officials are unsure what to do with the estimated 45,000 gallons of PFAS foam that they will buy back from local departments.

A plan to have the foam burned in an upstate New York facility was halted after tests around the Norlite high-temperature incineration plant in Cohoes, N.Y., found soils and water contaminated with PFAS.

"Scientists say incineration doesn't completely break down the PFAS foam," Hulick said. "It can get out of the smokestacks and impact air, soil and water."

Frigon said the state is now looking at costlier PFAS foam disposal options as far away as Ohio and is considering several Connecticut locations for "temporary storage" of these toxic materials.

'Buy it or else': Inside Monsanto and BASF's moves to force dicamba on farmers

Johnathan Hettinger, St. Louis Post-Dispatch

https://www.stltoday.com/news/local/state-and-regional/buy-it-or-else-inside-monsanto-and-basf-s-moves-to-force-dicamba-on-farmers/article_002f5e83-004d-52de-a686-eef5cb108192.html

Get poisoned or get on board.

That's the choice soybean farmers such as Will Glazik face. The past few summers, farmers near Glazik's central Illinois farm have sprayed so much of the weedkiller dicamba at the same time that it has polluted the air for hours and sometimes days.

As Glazik puts it, there are two types of soybeans: Monsanto's, which are genetically engineered to withstand dicamba, and everyone else's.

Glazik's soybeans have been the damaged ones. His soybean leaves will curl up, then the plants will become smaller and weaker. He's lost as much as 40 bushels an acre in some fields, a huge loss when organic soybeans are $20 a bushel. He has to hold his breath every year to see if the damage will cause him to lose his organic certification.

His neighbors who spray dicamba are frustrated with him, he said. There's an easy solution to avoid damage, they tell him: Buy Monsanto's seeds.

This reality is what Monsanto was counting on when it launched dicamba-tolerant crops, an investigation by the Midwest Center for Investigative Reporting found.

Monsanto's new system was supposed to be the future of farming, providing farmers with a suite of seeds and chemicals that could combat more and more weeds that were becoming harder to kill.

Instead, the system's rollout has led to millions of acres of crop damage across the Midwest and South; widespread tree death in many rural communities, state parks and nature preserves; and an unprecedented level of strife in the farming world.

Executives from Monsanto and BASF, a German chemical company that worked with Monsanto to launch the system, knew their dicamba weedkillers would cause large-scale damage to fields across the United States but decided to push them on unsuspecting farmers anyway, in a bid to corner the soybean and cotton markets.

Monsanto and BASF have denied for years that dicamba is responsible for damage, blaming farmers making illegal applications, weather events and disease. The companies insist that when applied according to the label, dicamba stays on target and is an effective tool for farmers.

Over the past year, the Midwest Center reviewed thousands of pages of government and internal company documents released through lawsuits, sat in the courtroom for weeks of deliberation, interviewed farmers affected by dicamba and weed scientists dealing with the issue up close. This story provides the most comprehensive picture of what Monsanto and BASF knew about dicamba's propensity to harm farmers' livelihoods and the environment before releasing the weedkiller.

The investigation found:

- Monsanto and BASF released their products knowing that dicamba would cause widespread damage to soybean and cotton crops that weren't resistant to dicamba. They used "protection from your neighbors" as a way to sell more of their products. In doing so, the companies ignored years of warnings from independent academics, specialty crop growers and their own employees.

- Monsanto limited testing that could potentially delay or deny regulatory approval of dicamba. For years, Monsanto struggled to keep dicamba from drifting in its own tests. In regulatory tests submitted to the EPA, the company sprayed the product in locations and under weather conditions that did not mirror how farmers would actually spray it. Midway through the approval process, with the EPA paying close attention, the company decided to stop its researchers from conducting tests.

- Even after submitting data that the EPA used to approve dicamba in 2016, Monsanto scientists knew that many questions remained. The company's own research showed dicamba mixed with other herbicides was more likely to cause damage. The company also prevented independent scientists from conducting their own tests and declined to pay for studies that would potentially give them more information about dicamba's real-world impact.

- Although advertised as helping out customers, the companies' investigations of drift incidents were designed to limit their liability, find other reasons for the damage and never end with payouts to farmers. For example, BASF told pesticide applicators that sometimes it is not safe to spray even if following the label to the letter, placing liability squarely on the applicators.

- The two companies were in lockstep for years. Executives from Monsanto and BASF met at least 19 times from 2010 on to focus on the dicamba-tolerant cropping system, including working together on the development of the technology, achieving regulatory approval for the crops and herbicides and the commercialization of crops.

- Monsanto released seeds resistant to dicamba in 2015 and 2016 without an accompanying weedkiller, knowing that off-label spraying of dicamba, which is illegal, would be "rampant." At the same time, BASF ramped up production of older versions of dicamba that were illegal to apply to the crops and made tens of millions of dollars selling the older versions, which were more likely to cause move off of where they were applied.

Bayer, which bought Monsanto in 2018, refused to grant an interview with the Midwest Center. Company officials did not respond to requests for comment, instead issuing a statement.

Spokesman Kyel Richard said the company "has seen an outpouring of support from grower organizations and our customers."

"We continue to stand with the thousands of farmers who rely on this technology as part of their integrated weed management program," Richard said.

BASF also did not respond to requests for comment, instead issuing a statement.

BASF spokeswoman Odessa Patricia Hines said that the company's version of dicamba has "different physical properties and compositions" than Monsanto's. Hines said the company is continuing to improve its dicamba technology.

A federal court banned the herbicide earlier this year, but the EPA reinstated dicamba for five more years in October.

Earlier this year, a federal jury sided with a Missouri peach farmer who sued the companies for driving his orchard out of business. The jury awarded Bill Bader $15 million for his losses and $250 million in damages designed to punish Bayer. Bayer and BASF are appealing the verdict. The punitive damages were later reduced to $60 million.

Hines of BASF pointed out that in the Missouri trial: "The jury's verdict found that only Monsanto's conduct warranted punitive damages."

Following the trial, Bayer announced a $400 million settlement with farmers harmed by dicamba, including $300 million to soybean farmers. Bayer said they expect BASF to pay for part of the settlement.

An attorney for Bader called the companies' conduct "a conspiracy to create an ecological disaster in order to increase their profits" in court filings. The case largely revolved around showing the companies knew dicamba would harm thousands of farmers.

According to court exhibits, in October 2015, Monsanto projected it would receive nearly 2,800 complaints from farmers during the 2017 growing season, a figure based on one-in-10 farmers having a complaint.

However, even one Monsanto executive knew these projections might be low, according to court records. In late August 2016, Boyd Carey, a Ph.D. crop scientist overseeing the claims process for Monsanto, realized it might be more like one-in-five and asked for a budget increase from $2.4 million to $6.5 million to investigate claims. Carey testified that he was awarded the increase.

The projected number of complaints rose to more than 3,200 for 2018, before going down. After 2018, Monsanto figured that fewer farmers would be harmed because more farmers would switch to Monsanto's crops to avoid being damaged, Carey testified in the Bader trial.

Dicamba affects all parts of Glazik's operation. He grows organic soybeans to avoid exposure to toxic pesticides. He also likes the higher premiums and the improved soil quality. But with dicamba in the air, he's less likely to be successful.

He now has to plant his soybeans later each year. Soybeans are less likely to be severely damaged when they're small, and planting them later than usual means they'll be smaller when the inevitable cloud of weedkiller envelops his crops. Later planting typically means a bit of yield loss. It also means a later harvest, which limits planting of cover crops Glazik uses to improve his soil.

"All crop damage aside," he said, the weedkiller is everywhere. Oaks, hickories and other trees are damaged near his farm, both in the country and in town, he said. "The fact is that the chemical can volatilize and move with the wind and in the air. We're breathing it."

A 'potential disaster'

For two decades, Monsanto made billions of dollars with Roundup Ready crops, which had been genetically engineered to withstand being sprayed by the weedkiller and adopted by nearly every American soybean farmer. But by the mid-to-late 2000s, Roundup was starting to fail. Farmer's fields were overwhelmed with "superweeds" that had developed resistance to Roundup's active ingredient, glyphosate.

In response, Monsanto developed new soybean and cotton seeds that were genetically engineered to withstand being sprayed by both glyphosate and dicamba, a very effective weedkiller used since the 1960s. It was also touted as the company's largest biotechnology rollout in company history. In just three years, Monsanto's dicamba-tolerant system was able to capture up to three-fourths of total soybean acreage, an area the size of Michigan.

Dicamba was not widely used during the growing season because of its propensity to move off-target and harm other plants. Because of its limited use, fewer weeds were resistant to it, making it an effective replacement for Roundup. Monsanto even dubbed the crops as its money-maker's next generation, calling them Roundup Ready 2 Xtend.

But the company faced a problem with dicamba: The weedkiller drifted onto non-resistant plants, some as far as miles away. In its own testing over the years, Monsanto had accidentally harmed its own crops dozens of times.

As far back as 2009, Monsanto and BASF received warnings about dicamba from several sources — one company called it a "potential disaster," according to court records — but they decided to plow ahead anyway.

"DON'T DO IT; expect lawsuits," wrote one Monsanto employee, summarizing academic surveys the company commissioned about dicamba's use.

In order to commercialize dicamba, both Monsanto and BASF worked to develop new formulations with low volatility.

Off-target movement from dicamba can happen in two main ways: drift and volatilization. Drift is when the chemical's particles move off the field when they are sprayed, generally by wind in the seconds or minutes after it is applied. Volatilization is when dicamba particles turn from a liquid to a gas in the hours or days after the herbicide is applied.

Damage from volatilization frequently occurs through a process called "atmospheric loading," which is when so much dicamba is sprayed at the same time that it is unable to dissipate and persists in the air for hours or days poisoning whatever it comes into contact with.

Volatilization is particularly concerning because dicamba can move for miles and harm non-target crops, especially soybeans, and even lawns and gardens. Tomatoes, grapes and other specialty crops are also at-risk of being damaged.

Despite being touted as less volatile, the new versions — Monsanto's XtendiMax with VaporGrip Technology and BASF's Engenia — were unable to stop the movement entirely.

During its 2012-2014 testing of an older version of XtendiMax, Monsanto had at least 73 off-target incidents, according to court documents.

In 2014, Monsanto had significant dicamba damage at a training facility in Portageville, Missouri. Even in its own promotional videos, Monsanto couldn't prevent non-dicamba tolerant soybeans from showing symptoms of damage.

The EPA took note of an incident where, through volatilization, dicamba turned into a gas and apparently floated more than 2 miles away, much farther than it was supposed to. During that incident, no one had measured how badly the crops had been damaged and the EPA was unable to definitively determine the symptoms were caused by dicamba. The EPA decided that was an "uncertainty" and approved the use of the weedkiller with a 110-foot buffer zone.

In 2015, knowing the EPA was keeping an eye on off-target movement, Monsanto decided to halt all testing of XtendiMax with VaporGrip Technology. According to court records, it kept its own employees who were interested in developing recommendations for farmers from testing, and it limited trials by independent academics in order to maintain a "clean slate." It asked BASF to halt its dicamba testing as well.

When a weed science professor at the University of Arkansas asked Monsanto for a little bit of Xtendimax to test its volatility, the company told him it would have difficulty producing enough dicamba for both him and its independent tests.

A Monsanto employee, who worked at the company for 35 years, didn't think much of that explanation when he forwarded the email to a colleague.

"Hahaha difficulty in producing enough product for field testing," he wrote. "Hahaha bullshit."

Illegal spraying a 'ticking time bomb'

Weeds cut into farmers' profits. With low profit margins, farmers will use any tool they can to control weeds.

Monsanto recognized this in 2015 and 2016 when they released dicamba-tolerant crops without their new versions of dicamba. An internal Monsanto slide shows the company knew that many farmers would likely illegally spray older, more volatile versions and harm other farmers' crops.

But the company decided the benefits of establishing a market share outweighed the risks and launched the cotton crops in 2015. The EPA allowed farmers to spray other weedkillers on the crops, and Monsanto decided to launch the seeds with "a robust communication plan that dicamba cannot be used."

When the seeds were sold, Monsanto put a pink sticker on each bag to indicate it was illegal to spray dicamba on the crops in 2015. The company also sent letters to all growers and retailers, among other tactics, to limit illegal applications of dicamba.

However, in internal communications in April 2015, members of Monsanto's cotton team joked about this risky strategy.

"One sticker is going to keep us out of jail," one wrote.

In October 2015, a BASF employee reported hearing that growers sprayed older versions of dicamba on the cotton that year.

Monsanto doubled down on this risky strategy in 2016, releasing dicamba-tolerant soybean crops without a weedkiller, too. Meanwhile, Monsanto also declined to investigate drift incidents in 2015 and 2016.

At a February 2016 meeting in Puerto Rico, a BASF executive expressed concerns to Monsanto that the "widespread" illegal spraying would likely become "rampant" due to the decision.

BASF also benefited from Monsanto's decision. The company's sales of older versions of dicamba spiked in 2016. Retailers sold $100 million worth of its older versions of the weedkiller, compared to about $60 million annually in 2014 and 2015, according to internal documents. BASF documents indicated the sales increased because of dicamba-tolerant seeds.

In the summer of 2016, BASF sales representatives in the field were reporting older versions of dicamba causing damage, hinting the problem was predictable.

"The one thing most acres of beans have in common is dicamba damage. There must be a huge cloud of dicamba blanketing the Missouri Bootheel," a BASF employee wrote in a July 4, 2016, report. "That ticking time bomb finally exploded."

Drift expected to drive sales

Dicamba drift led to widespread news coverage. Monsanto and BASF expected to turn it all into more money.

In an internal document, Monsanto told its sales teams to target growers that weren't interested in dicamba and dicamba-resistant crops. The sales pitch? Purchasing Monsanto's products would protect them from their neighbors.

In April 2017, a market research document prepared by Bank of America found many farmers were doing just that.

"Interesting assessment that much of the Xtend acreage was planted to protect themselves from neighbors who might be using dicamba? Gotta admit I would not have expected this in a market research document," a Monsanto executive wrote.

In internal slides from a September 2016 meeting, BASF identified "defensive planting" as a potential market opportunity. BASF also had a market research document that found defensive planting was driving sales.

However, a "tough questions" memo distributed to BASF employees in November 2017 told employees the opposite: "We have not considered 'defensive planting' in our sales projections."

Even as thousands of farms across millions of acres of cropland were being damaged, Monsanto officials were touting the damage as a sales opportunity.

"I think we can significantly grow business and have a positive effect on the outcome of 2017 if we reach out to all the driftee people," another Monsanto sales employee wrote in an email that year.

One of those customers was Bill Bader, the peach farmer who sued Monsanto for destroying his orchard. Bader testified that while he could not protect his peach trees, in 2019 he planted dicamba-tolerant soybeans to help protect his soybean crops from getting damaged.

Bill Bader, owner of Bader Farms, and his wife Denise pose in front of the Rush Hudson Limbaugh Sr. United States Courthouse in Cape Girardeau, Missouri, on Monday, Jan. 27, 2020 . photo by Johnathan Hettinger/The Midwest Center for Investigative Reporting

Johnathan Hettinger

"This is the first product in American history that literally destroys the competition," Bader's attorney, Billy Randles, said. "You buy it or else."

Research designed to downplay harm

For years, the EPA told Monsanto it needed to address volatility in its dicamba studies when applying for regulatory approval. But the tests Monsanto conducted did not reflect real-world conditions.

Dicamba would primarily be sprayed on soybeans, but 2015 studies submitted to the EPA were conducted at a cotton field in Texas and a dirt field in Georgia. Neither state has a large amount of soybeans. This guidance followed directives from Monsanto lobbyists that incorporated earlier Monsanto research showing that higher volatility was detected on fields with soybeans.

In addition, Monsanto did not follow the rules that would eventually be codified on the label.

During the testing in Texas, wind speeds were 1.9 to 4.9 miles per hour. In Georgia, wind speeds were 1.5 to 3 miles per hour. According to the label the EPA approved, dicamba can only be sprayed with wind speeds between 3 and 10 miles per hour. Spraying at low wind speeds is more likely to lead to volatilization because there is increased risk of a temperature inversion, which is when cooler air is caught beneath a layer of warmer air making gases more likely to persist near the ground.

After Monsanto submitted the tests to the EPA, the company still had a lot of unknowns about its product's volatility, according to internal emails.

A Monsanto researcher wrote an email in February 2016 to his coworkers that underscored how little the company knew about the propensity of dicamba to damage crops.

"We don't know how long a sensitive plant needs in a natural setting to show volatility damage. We don't know what concentration in the air causes a response, either," he wrote. "There is a big difference for plants exposed to dicamba vapor for 24 vs. 48 hours. Be careful using this externally."

Dicamba coverage by the Post-Dispatch

Despite the design of the studies, and the EPA's own studies that showed dicamba posed a risk to 322 protected species of animals and plants, the agency conditionally approved the herbicide in 2016. The agency determined that mitigation measures — such as not spraying near specialty crops and endangered species habitats, wind speed restrictions, and a ban on aerial applications — would keep spray droplets on target.

It was only approved for two years, when the agency would review its approval again.

After the conditional approval, BASF knew dicamba still posed risks. While BASF told farmers dicamba drift wouldn't hurt their bottom lines, the company privately told pesticide applicators that any drift they caused could decrease farmers' harvests, according to internal BASF documents. A BASF executive said "from a practical standpoint" Engenia was not different from older dicamba versions.

Even Monsanto's sales teams were having problems with dicamba's reputation after the EPA approved the weedkiller.

In an internal email, a Monsanto salesman took issue with BASF changing how it publicly discussed its dicamba product: It used to say volatility was not a problem, but now it said it was. Another chemical company saying volatility was bad could hurt Monsanto's sales.

"We need to get on this right now!" the salesman emailed his colleagues. "Deny! Deny! DENY!"

'Never admit guilt'

In 2017, the first season that the new versions of dicamba were approved, damage reached unprecedented levels. Around 3.6 million acres of soybeans were damaged, according to an estimate from the University of Missouri.

In July of that year, Monsanto executives scheduled a meeting to discuss how to combat coverage of complaints.

"We need REAL scientific support for our product to counteract the supposition happening in the market today," a Monsanto executive wrote in an email. "To be frank, dealers and growers are losing confidence in Xtendimax."

In late summer 2017, Monsanto had started to blame damage on a BASF weedkiller, which is used on the main competitor to Monsanto's own soybeans. In December 2017, Monsanto agreed to drop that argument as part of a defense strategy with BASF against farmers.

Both Monsanto and BASF took steps to shield themselves from lawsuits.

The form Monsanto told its investigators to use when examining farmer complaints was "developed to gather data that could defend Monsanto," according to an internal company presentation. Later, Monsanto said that 91% of applicators using the form self-reported errors in spraying dicamba.

A BASF executive also edited his company's drift investigation Q&A.

Dicamba-resistant soybeans in rural McLean County on Aug. 7, 2017. The Roundup Ready 2 Xtend soybeans were touted as the next generation of glyphosate-resistant soybeans. Midwest Center for Investigative Reporting file photo.

"I was always told to never admit guilt," he said.

On top of the investigations, the label left pesticide applicators liable for damage because it was nearly impossible to follow. A 2017 survey of applicators found that most trained sprayers had issues with dicamba even when spraying in good conditions and while following the label.

With damage being reported in 2017, Monsanto also declined to pursue a study that would have given the company more information about how dicamba caused damage on real farms. A Monsanto off-target movement researcher sent a request for a project proposal to Exponent, which helped analyze the data Monsanto submitted to the EPA. The study could be done in less than two weeks and cost $6,000.

The researcher forwarded the proposal to two Monsanto executives.

The company never acted on it, one testified in the trial.

'The problems have not gone away'

In order to combat the damage, the EPA developed new restrictions on dicamba. In doing so, the EPA dropped an idea that Monsanto opposed, and Monsanto dictated the new restrictions that were adopted.

State officials warned the EPA the changes wouldn't work. They were right. In 2018, at least 4.1 million acres were damaged, according to EPA documents.

Still, the EPA re-approved dicamba for the 2019 and 2020 growing seasons with new restrictions, some of which ignored agency scientists' recommendations.

States also increasingly took measures into their own hands, implementing spraying cut-off dates and temperature restrictions.

The damage continued. Illinois, the nation's largest soybean producing state, had more complaints than ever in 2019. Iowa had "landscape level" damage in 2020.

Aaron Hager, an associate professor of weed science at the University of Illinois, said it is clear the changes haven't worked.

"We have revised the label and revised it again," Hager said. "The problems have not gone away."

The EPA's decision was eventually voided by the Ninth Circuit Court of Appeals for failing to properly consider the impacts on farmers and the environment. The court ruled the agency gave too much deference to Bayer and also was lacking necessary data to show too much harm wouldn't be done.

Dicamba was recently reapproved, and Bayer continues to invest in it. The company will release new soybean seeds designed to be resistant to dicamba and glufosinate, another BASF herbicide, to fill 20 million acres in 2021. The company also continues to work toward approval of other seeds that are resistant to dicamba and other herbicides.

Glazik, the organic Illinois soybean farmer, works as a crops consultant advising other farmers on what to plant. As the damage has continued, he said, more and more of his clients are "feeling bullied into" buying the dicamba-tolerant crops. Others tell him, they have to spray dicamba or else they can't control the weeds.

But as an organic farmer, Glazik said, no single herbicide is necessary. Instead, farmers have a choice. Well-managed fields can be weed-free without using toxic chemicals, he said.

"You don't have to have the dicamba spray to control weeds in a field," he said.

Attorneys General Press for Ruling on Pesticide Use Restrictions

Sylvia Carignan, Bloomberg Law

https://news.bloomberglaw.com/environment-and-energy/attorneys-general-press-for-ruling-on-pesticide-use-restrictions?context=search&index=1

Several Democratic state attorneys general and environmental advocacy groups told a federal appeals court Monday that the EPA's registration for the pesticide sulfoxaflor threatens pollinator populations.

The Environmental Protection Agency previously asked the U.S. Court of Appeals for the Ninth Circuit to allow it to revise its registration for sulfoxaflor without vacating it. In an amicus brief, 11 attorneys general said permitting a remand, instead of ruling on the issue, would significantly delay any regulatory changes because of the EPA's existing five-year backlog of pesticides awaiting analysis.

The EPA admitted in its motion for remand, without vacating the rule, that its registration for sulfoxaflor violates the Endangered Species Act.

"An order granting EPA's motion could enable EPA to frustrate FIFRA review of future pesticide registration decisions violating the ESA, admitting the violation, and moving for remand without vacatur," the attorneys general of California, Hawaii, Maryland, Minnesota, New Jersey, New York, New Mexico, Oregon, Vermont, Washington state, and Massachusetts wrote in the brief. "As a result, EPA could indefinitely delay review of its pesticide registrations while potentially risky pesticides remain on the market."

According to the agency, sulfoxaflor is effective against pests that are becoming more resistant to previously used insecticides, such as organophosphates. It is marketed under the brands Isoclast, Transform, and Closer.

The EPA claims there are few viable alternatives to sulfoxaflor, and alternatives may need to be applied more frequently, increasing the risk of harm to other insects and plants.

The environmental advocates, which include the Conservation Law Foundation and the Sierra Club, said in their brief the EPA hasn't thoroughly studied alternatives to sulfoxaflor, and doesn't know the full extent of the pesticide's toxicity.

"Leaving EPA's decision in place would risk environmental harm," they wrote in their brief.

The advocates and attorneys general sided with the petitioner, the Center for Food Safety, which sought review of the agency's 2019 decision to allow new uses of the pesticide and remove some restrictions.

The EPA didn't immediately respond to a request for comment.

The EPA first registered sulfoxaflor in 2013.

The Sierra Club has received funding from Bloomberg Philanthropies, the charitable organization founded by Michael Bloomberg. Bloomberg Law is operated by entities controlled by Michael Bloomberg.

The case is Ctr. for Food Safety v. Wheeler, 9th Cir., No. 19-72109, amicus briefs filed 12/7/20.

From the Farm: Navigating the dicamba quandary

Stu Ellis, WCIA-TV

https://www.wcia.com/the-morning-show/from-the-farm-navigating-the-dicamba-quandary/

It may be winter, but farmers are making plans for spring planting, and weed control is an issue.

After dicamba herbicide arrived 3 years ago, Illinois imposed application restrictions to reduce its volatility. But the U.S. Environmental Protection Agency (EPA) has said those restrictions are no longer permitted.

Farmers may be ordering soybean seed now for spring planting, but with XtendFlex soybeans herbicides other than dicamba can be ordered next spring, if the Illinois Department of Agriculture (IDOA) has been unable to reconcile its differences with the U.S. EPA, says University of Illinois weed specialist Aaron Hager.

"They made it very clear with the registrations that if states wanted to impose additional restrictions, in addition to those on the federal label they could go through rule-making to do that. That is an option that I believe the Illinois Department of Agriculture is considering," says Hager. "They would like to implement the same additional restrictions the labels had last year, would be a June 30 application deadline, as well as prohibition if the forecast temperature is going to be 85 degrees or higher.

"I think they are looking at options now, as of yesterday, the state has not approved these new products, so they cannot be used here until the state grants a label."

Hager says until the IDOA makes a decision, farmers do have an alternative in soybean varieties to avoid the dicamba quandary.

"From what I've heard from various seed company representatives, a lot of the focus has shifted from strictly Xtend soybean varieties to the XtendFlex," Hager says, "and with XtendFlex you do have the ability to spray a glufosinate-containing herbicide post-emergence. It would not necessarily be that a farmer would not have no post options, for example, if the state does not approve these labels or is delayed in approving these labels farmers on XtendFlex acres would still have an option for post control."

The IDOA declined to comment on its plans.

US Ninth Circuit denies request to reconsider Enlist Duo lawsuit

J. R. Pegg, Chemical Week

https://chemweek.com/CW/Document/115870/US-Ninth-Circuit-denies-request-to-reconsider-Enlist-Duo-lawsuit

The US Court of Appeals for the Ninth Circuit last week rejected a bid by environmentalists to reconsider their challenge of the EPA's registration of Corteva Agriscience's Enlist Duo (glyphosate + 2,4-D choline) herbicide, effectively ending the six-year legal dispute.

The decision is a major win for Corteva, farm groups and the EPA, which urged the court not to rehear the litigation and called the request for further review baseless.

Enlist Duo has been developed for use on maize and soybeans genetically modified to tolerate the herbicides.

Sprouting controversy

The controversy began in late 2014 when the EPA registered Enlist Duo for use on GM maize and soybeans in six states.

A coalition of environmentalists led by the Natural Resources Defense Council and the Center for Food Safety quickly filed suit, alleging that the EPA had failed to fully assess the human health impacts of the two active ingredients under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). The groups argued that the EPA had ignored its obligations to ensure that legal uses of the herbicide had not posed harm to species protected by the Endangered Species Act (ESA).

The EPA amended its registration in the spring of 2015 to include an additional nine states and contested the lawsuit. However, it changed course in November 2015, after discovering information on possible "synergistic weed control properties" within a Dow patent application.

The discovery prompted the Ninth Circuit to remand the registration back to the EPA in January 2016, allowing Enlist Duo to stay on the market while the Agency considered new data about possible synergistic effects of the two ais on non-target plants. In January 2017, the EPA completed that review, concluding that existing buffers and mitigation measures were sufficient to protect endangered plants. It issued a new conditional registration that expanded approval of Enlist maize and soybeans to 34 states and added Enlist cotton to the label.

The environmental groups filed a new complaint with the Ninth Circuit, again arguing that the EPA had failed to fully review the impacts of the herbicide on the monarch butterfly, besides ignoring evidence of human health concerns from expanded use of 2,4-D and violating the ESA.

In July, the Ninth Circuit panel rejected the bulk of the allegations bar the claim that the agency's FIFRA review of the herbicide's impact on monarch butterflies had fallen short – notably the consideration of the potential harms from the destruction of milkweed.

Minor error, remand only

In a 2-1 ruling, the court concluded that the error was minor and opted to remand the registration back to the Agency to revise its assessment of the potential harm to monarch butterflies.

The majority found that the petitioners had failed to cogently argue their claims on human health, resulting in rejection of their claim that the EPA had failed to consider the possibility of Enlist Duo increasing the use of glyphosate over time. It also denied the allegation that the Agency had failed to adequately consider the volatility of 2,4-D, even though its evaluation "probably could have been better."

"But it is not our role to second-guess EPA's conclusion," US Circuit Court Judge Ryan Nelson wrote for the majority. "Moreover, there is no evidence in the record that its conclusion was wrong."

The court tossed out all the claims relating to violation of the ESA, observing that the EPA had "applied the correct legal standard and supported its conclusions" when it considered the risks to species.

"The EPA did what the ESA required it to do: assess risks to determine whether the exposure of protected species and critical habitat to potentially harmful chemicals would have any possible effect," Nelson explained.

The dissenting judge, however, argued that the EPA had violated the ESA by failing to use the best available data and concluding the registrations should have been vacated.

The Center for Food Safety and its allies in September cited the dissent in their request for a rehearing of the case, arguing that the majority decision ran counter to legal precedent and ignored the EPA's obligations under the ESA.

The ruling "raises questions of exceptional importance," the groups said in their request seeking further review of the litigation. "The decision allows over 500 endangered species spanning nearly 200 million acres to be exposed to a toxic pesticide without any Endangered Species Act consultation."

The court was unswayed. Two of the three judges on the original panel rejected the call for a rehearing and the full court declined to weigh in on the dispute.

The ruling leaves the environmentalist groups with only one legal lifeline – the US Supreme Court – and the case poses little controversy that would likely prompt the nation's top court to intervene.

The Bad News Keeps Piling Up for Glyphosate

Eric Sfiligoj, CropLife

https://www.croplife.com/crop-inputs/the-bad-news-keeps-piling-up-for-glyphosate/

When news first broke of Bayer reaching a settlement to eliminate most of the pending litigation concerning glyphosate in 2020, I thought perhaps things would finally settle down for the world's most popular herbicide.

But I was wrong.

Just as a reminder, 2021 is the year that France's Health and Environment Agency has vowed to phase out glyphosate use, per a promise made back in 2017 by President Emmanuel Macron. Although this restriction stops short of a full ban due to a lack of non-chemical alternatives in some areas, the country has already ceased using glyphosate as a weed killer in alleys between vines and fruit trees or in crop fields that are ploughed.

Then, in late November, the EPA released findings that more than 90% of endangered species are "likely to be adversely affected" by use of glyphosate, though mostly through non-agricultural uses. This evaluation was conducted to comply with the Endangered Species Act (ESA), which prohibits federal agencies from engaging in actions likely to "jeopardize the continued existence" of threatened or endangered species.

Once EPA analyzes the comments it receives from outside sources after the first of the year, it will issue a final report determining whether the use of glyphosate "may affect" ESA-listed listed species or their critical habitats. If so, the agency will have to consult with the Fish and Wildlife Service and National Marine Fisheries, which will prepare its own evaluations identifying ways to reduce those impacts, including introducing possible restrictions.

Of 1,795 species it looked at, the EPA report found 1,676, or 93%, were likely to be adversely affected by glyphosate applications. More than half of those, 940, are plants.

Top of Form

Bottom of Form

I know *CropLife* magazine recently published the results from its annual *CropLife 100* survey, which found that 45% of respondents believed glyphosate would continue to experience push-back from various sources, with increasing pressure to find alternatives for its use in crop fields. Going into 2021, it appears these views were well founded indeed!

EPA Releases Updates to List of Companies Subject to Fees for Risk Evaluations

Christopher R. Blunck, TSCA Blog

http://www.tscablog.com/entry/epa-releases-updates-to-list-of-companies-subject-to-fees-for-risk-evaluati

On November 25, 2020, the U.S. Environmental Protection Agency (EPA) released updates to the interim final list of manufacturers and importers subject to fees for the next 20 chemicals undergoing risk evaluation under Section 6(b) of the Toxic Substances Control Act. According to EPA, "[t]he updated list includes additional manufacturers not identified on the final list of companies and removes manufacturers that self-identified in error or imported the chemical solely for the purpose of research and development." EPA stated it is committed to ensuring this list is accurate and that it planned to use this updated list to begin invoicing for fees in early November. EPA also stated that due to the public health emergency, EPA is exploring options for payment flexibilities.

On September 4, 2020, EPA published a *Federal Register* notice announcing the final lists identifying the manufacturers (including importers) of the 20 chemical substances that have been designated as high-priority substances for risk

evaluation and for which fees will be charged. 85 Fed. Reg. 55283.

More information is available in our September 4, 2020, memorandum, "EPA Publishes Final Scope Documents and List of Manufacturers Subject to Fees for Risk Evaluations of High-Priority Chemicals."

EPA Will Hold Webinars on Carbon Tetrachloride, TCE

Lynn L. Bergeson and Carla N. Hutton, TSCA Blog

http://www.tscablog.com/entry/epa-will-hold-webinars-on-carbon-tetrachloride-tce

The U.S. Environmental Protection (EPA) will hold a webinar on **December 10, 2020**, to educate stakeholders on the risk management process under the Toxic Substances Control Act (TSCA) and the findings in the final risk evaluation for carbon tetrachloride. The webinar will also provide an opportunity for the public to provide input on considerations EPA should take into account for managing these unreasonable risks. Registration is open. Stakeholders who would like to provide oral comments must register by **December 8, 2020, at 1:00 p.m. (EST)**. As reported in our November 4, 2020, memorandum, "Final Risk Evaluation for Carbon Tetrachloride Finds Unreasonable Risks to Workers and Occupational Non-Users," EPA reviewed 15 conditions of use, "all of which are associated with industrial and commercial work and primarily involve the manufacturing of other chemicals." EPA found unreasonable risks to workers and occupational non-users (ONU) for 13 of the 15 conditions of use. EPA found no unreasonable risks to the environment. According to EPA, there are no consumer uses of this chemical.

On **December 15, 2020**, EPA will hold a webinar on the findings in the final risk evaluation for trichloroethylene (TCE). Registration is open, and stakeholders who would like to provide oral comments must register by **December 11, 2020, at 5:00 p.m. (EST)**. As reported in our November 24, 2020, memorandum, "EPA Evaluates 54 Conditions of Use for TCE, Finding That 52 Present an Unreasonable Risk," of the 54 conditions of use that EPA reviewed, EPA found that 52 present an unreasonable risk to workers, ONUs, consumers, and bystanders. EPA determined that distribution in commerce and consumer use of TCE in pepper spray do not present an unreasonable risk. EPA also found no unreasonable risks to the environment.

++

For more news, visit:

- Inside EPA: https://insideepa.com/
- Inside TSCA: https://insideepa.com/inside-tsca-home
- Bloomberg Environment and Energy: https://news.bloombergenvironment.com/environment-and-energy/

If you'd like to be removed or would like to add someone to the listserv please contact Bailey Rosen at Rosen.Bailey@epa.gov. Feedback and interesting articles are welcomed. Thanks and enjoy!

And while you're reading.... Remember to shoot your coworkers a shooting star!